# AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT FOR THE DISCHARGE OF REVERSE OSMOSIS WASTE WATER INTO MARINE WATERS OF THE CNMI MPG450000

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et seq., the "Act"), and with the Federal Regulations at 40 CFR 122.28, EPA issues a general permit to cover discharge of reverse osmosis wastewater from facilities located in the CNMI meeting the following criteria:

- 1. Facility operates a reverse osmosis (RO) unit or units designed specifically for the production of potable water; and
- 2. Discharge from individual RO unit is less than 0.5 million gallons per day (MGD); and
- 3. Discharge reaches marine surface waters (i.e. directly, through a stormwater conveyance channel, or through an injection well that may mix with marine surface waters); and
- 4. An individual 401 Water Quality Certification has been obtained from The Division of Environmental Quality, Commonwealth of the Northern Mariana Islands, which certifies that the discharge will not cause or contribute to violations of water quality standards, or impact seagrass beds or coral reef habitat.

If facility meets the above criteria, the facility may apply for coverage under the general permit by submitting a complete Notice of Intent (NOI) at least 90 days prior to the planned date of discharge. The NOI must include the following:

- Completed NPDES application Forms 1 and Form 2C. If previously applied, please send any updated information/changes to application;
- 2. A cover letter indicating that the permittee is seeking coverage under this general permit, has read this general permit and will comply with all its conditions;
- 3. Individual Water Quality Certification from Division of Environmental Quality under Section 401 of the Act;
- 4. A list of all chemicals used (both generic name and chemical names) both during typical water treatment and during cleaning of units;
- 5. Name(s), location(s) and average Total Dissolved Solids of source waters; and

6. Description and location of monitoring stations(s).

The NOI must be submitted to USEPA and Commonwealth of Northern Marianas Islands at the addresses listed under section 3 of this permit:

Sixty (60) days after receipt of NOI by EPA, the applicant may discharge in accordance with conditions of this general permit and the individual 401 certification unless otherwise notified by EPA or CNMI DEQ. EPA reserves the right to deny the general permit to anyone at anytime and require coverage under an individual permit. Furthermore, in accordance with 122.28(b), this permit may be modified, revoked and reissued, or terminated in accordance with applicable requirements of part 124.

Permittees must submit another NOI 90 days prior to the expiration date of this general permit if the permittee intends to continue discharging beyond that date.

The discharge must be in accordance with effluent limitations, monitoring requirements and other conditions set forth herein, in the 401 certification, and in the attached EPA Region 9 "Standard Federal NPDES Permit Conditions."

ais general permit shall become effective on				
	authorization to discharge shall expire at, (five years after effective date).			
Signed this	_ day of			
	For the Regional Administrator			

Water Division

Alexis Strauss, Director

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## 1. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

a. Effluent shall be sampled at the point of discharge, prior to mixing with the receiving water. If discharge occurs into a stormwater conveyance channel or pipe, monitoring shall be performed before discharge into the channel or pipe.

Monitoring shall be performed during the regular discharge of brine water and during the intermittent discharge of cleaning waste water.

Monitoring will be performed at the frequency specified below. During the discharge of cleaning waste water, monitoring shall be performed every time cleaning waste water is discharged.

Samples of cleaning waste water should be identical in characteristics to the that which is discharged to the surface water. For example, if cleaning waste water is stored or mixed with brine waste water prior to discharge in order to reduce toxicity, samples should be taken of the stored or mixed effluent.

<sup>&</sup>quot;Cleaning waste water" includes RO backwash water, filter backwash water or any other waste water with different chemical characteristics than the normal brackish reject water.

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITATIONS	MONITORING	REQUIREMENTS
	DAILY MAX.	MEASUREMENT FREQUENCY <sup>(1)</sup>	SAMPLE TYPE
FLOW		CONTINUOUS	N/A
TOTAL DISSOLVED SOLIDS		ONCE/QUARTER	DISCRETE
TOTAL NITROGEN	$0.40 \ \text{mg/l}$	ONCE/MONTH	DISCRETE
TOTAL PHOSPHOROUS	0.025 mg/l	ONCE/MONTH	DISCRETE
SULFIDE (undissociated)	0.002 mg/l	ONCE/MONTH	DISCRETE
AMMONIA (un- ionized)	0.02 mg/l	ONCE/MONTH	DISCRETE
TURBIDITY (6)	NOT > 1.5 NTU	ONCE/MONTH	DISCRETE
TOTAL RESIDUAL CHLORINE (3)	0.01 mg/l	ONCE/DAY	DISCRETE
PRIORITY POLLUTANT SCAN		(4)	DISCRETE
рН	(5)	ONCE/DAY	DISCRETE

- The frequency specified below applies only to the discharge of brine water. Monitoring shall be performed once/discharge during the discharge of cleaning waste water.
- "Non-detectable." Permittee is not required to test for formaldehyde should they submit, in writing, a statement certifying that formaldehyde is not used in the cleaning process.
- Monitoring required only if products containing chlorine are used. Non-detects shall be considered compliance.
- Permittee shall conduct priority pollutant scans on the effluent (both the cleaning waste water and the brine water discharge) once within the first 6 months of general permit and again every time location of source water changes.
- The pH of the effluent is limited between 6.5 and 8.6 standard units at all times.

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<sup>(6)</sup> Filter backwash water, which is separate from the discharge of any RO cleaning wastewater, shall be monitored for turbidity once/discharge during the discharge of any filter backwash water.

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- b. The discharge shall be free of substances attributable to domestic, industrial, or other controllable sources of pollutants and shall be capable of supporting desirable aquatic life and be suitable for recreation in and on the water.
  - c. The discharge shall not cause floating debris, oils, grease, scum, or other floating materials.
  - d. The discharge shall be free from substances in amounts sufficient to produce taste or odor in the water or detectable off flavor in the flesh of fish, or in amounts sufficient to produce objectionable odor, turbidity, or other conditions in the receiving waters.
  - e. There shall be no discharge of cleaning wastes, biocides, pathogenic organisms, toxic, radioactive, corrosive, or other deleterious substances at levels or in combinations sufficient to be toxic or harmful to human, animal, plant or aquatic life, or in amounts sufficient to interfere with any beneficial use of the water.
  - f. There shall be no discharge of substances or conditions or combinations thereof in concentrations which produce undesirable aquatic life.
  - g. The discharge shall not cause the temperature of the receiving water to vary by more than  $1.5^{\circ}F$  (0.9°C) from ambient conditions.
  - h. The discharge shall not cause the dissolved oxygen level in the receiving water to drop below 6.0 mg/l.
  - i. The discharge shall not cause a change in channels, basic geometry or fresh water influx shall be made which would cause permanent changes in isohaline patterns of more than 10% from the natural conditions or which would otherwise adversely affect the indigenous biota and natural sedimentary patterns.
  - j. The use of products containing formaldehyde is prohibited.

# 2. ADDITIONAL CONDITIONS

a. The permittee shall also comply with all requirements included under their individual 401 certification.

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b. If CNMI or USEPA believes, based on monitoring data, facility inspections, or receiving water quality that a permittee's discharge is, or may be causing or contributing to exceedances of water quality criteria, or in any way impacting seagrass beds or live coral reef habitat, USEPA may require the facility to obtain an individual permit. An individual permit may include additional, or more stringent effluent limitations, additional effluent and/or receiving water monitoring, including whole effluent toxicity testing and/or dye/tracer studies to determine the extent (if any) of the impacts.

#### 3. REPORTING AND MONITORING

a. Reporting of Monitoring Results

Monitoring results obtained during the previous 3 months shall be summarized for each month and submitted on forms to be supplied by the Regional Administrator, to the extent that the information reported may be entered on the forms. The results of all monitoring required by this permit shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this permit. Unless otherwise specified, discharge flows and pH shall be reported in terms of the average value over each 30-day period and the maximum recorded value over that 30-day period. Monitoring reports shall submitted on a quarterly basis and be postmarked no later than the 28th day of the month following the completed reporting period (calander quarter). The first report is due thirty days following the first quarter ending March, June, August or December after the effective date of this permit. Duplicate signed copies of these, and all other reports required herein, shall be submitted to the Regional Administrator and the Commonwealth at the following addresses:

Regional Administrator Environmental Protection Agency Attention: CMD-5 75 Hawthorne Street San Francisco, CA 94105

Director
Div. of Environmental Quality
P.O. Box 1304
Saipan, MP 96950

b. Twenty-Four Hour Reporting of Noncompliance

The permittee shall report any noncompliance which may endanger health or the environment. Any information shall

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be provided orally within 24 hours from the time the permittee becomes aware of the circumstances to the following person or their office:

Director, Div. of Environmental Quality 670/664-8550 or 664-8555

If the permittee is unsuccessful in contacting the person above, he/she shall report by 9 a.m. on the first business day following the noncompliance. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

### c. Definitions

- 1. A "discrete" sample means any individual sample collected in less than 15 minutes. A "discrete" sample for enteric virus means any individual sample collected in less than 3 hours.
- 2. The "daily maximum" concentration means the measurement made on any single discrete sample or composite sample.
- d. Monitoring Modification

Monitoring, analytical, and reporting requirements may be modified by the Regional Administrator upon due notice.

4. EPA REGION 9 STANDARD CONDITIONS (see attachment)